## Teoremas

1. 
$$(f \pm g)'(x) = f'(x) \pm g'(x)$$

**2.** 
$$(kf(x))' = kf'(x)$$

3. 
$$(fg)'(x) = f(x)g'(x) + g(x)f'(x)$$

**4.** 
$$\left(\frac{f}{g}\right)'(x) = \frac{g(x)f'(x) - f(x)g'(x)}{(g(x))^2}$$

## **Funciones**

1. 
$$f(x) = c$$
 donde  $c$  es una constante.

**2.** 
$$f(x) = \sqrt{x}$$

**3.** 
$$f(x) = x^n$$

**4.** 
$$f(x) = a^x$$

**5.** 
$$f(x) = e^x$$

**6.** 
$$f(x) = \log_a x$$

7. 
$$f(x) = \ln x$$

**8.** 
$$f(x) = sen x$$

**9.** 
$$f(x) = \cos x$$

**10.** 
$$f(x) = tg x$$

**11.** 
$$f(x) = ctq x$$

**12.** 
$$f(x) = sec x$$

**13.** 
$$f(x) = cosec \ x$$

**14.** 
$$f(x) = senh x$$

**15.** 
$$f(x) = \cosh x$$

**16.** 
$$f(x) = tqh x$$

**17.** 
$$f(x) = coth \ x$$

**18.** 
$$f(x) = sech x$$

**19.** 
$$f(x) = cosech \ x$$

## Derivadas

$$f'(x) = 0$$

$$f'(x) = \frac{1}{2\sqrt{x}}$$

$$f'(x) = nx^{n-1}$$

$$f'(x) = a^x \ln a$$

$$f'(x) = e^x$$

$$f'(x) = \frac{\log_a e}{x}$$

$$f'(x) = \frac{1}{x}$$

$$f'(x) = \cos x$$

$$f'(x) = -sen x$$

$$f'(x) = sec^2 x$$

$$f'(x) = -cosec^2 x$$

$$f'(x) = \sec x \ tg \ x$$

$$f'(x) = -cosec \ x \ ctg \ x$$

$$f'(x) = \cosh x$$

$$f'(x) = senh x$$

$$f'(x) = sech^2 x$$

$$f'(x) = -cosech^2 x$$

$$f'(x) = -sech \ x \ tgh \ x$$

$$f'(x) = -cosech \ x \ ctgh \ x$$

**20.** 
$$f(x) = arcsen x$$

**21.** 
$$f(x) = \arccos x$$

**22.** 
$$f(x) = arctg x$$

**23.** 
$$f(x) = arcctg x$$

**24.** 
$$f(x) = arcsec x$$

**25.** 
$$f(x) = arccosec x$$

$$f'(x) = \frac{1}{\sqrt{1 - x^2}}$$

$$f'(x) = \frac{-1}{\sqrt{1 - x^2}}$$

$$f'(x) = \frac{1}{1+x^2}$$

$$f'(x) = \frac{-1}{1+x^2}$$

$$f'(x) = \frac{1}{x\sqrt{x^2 - 1}}$$

$$f'(x) = \frac{-1}{x\sqrt{x^2 - 1}}$$